Practicing Strategic Leadership Without a License

A Monograph by COL David A. Danikowski U.S. Army



School of Advanced Military Studies United States Army Command and General Staff College Fort Leavenworth, Kansas

AY 09-10

Disclaimer: Opinions, conclusions, and recommendations expressed or implied within are solely those of the author, and do not represent the views of the US Army School of Advanced Military Studies, the US Army Command and General Staff College, the United States Army, the Department of Defense, or any other US government agency. Cleared for public release: distribution unlimited.

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE (DD-MM-YYYY) 05-05-2010	Master's Thesis	JUL 2009 – MAY 2010
4. TITLE AND SUBTITLE Practicing Strategic Leadership W	ithout a License	5a. CONTRACT NUMBER
		5b. GRANT NUMBER
		5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S) COL David A. Danikowski		5d. PROJECT NUMBER
		5e. TASK NUMBER
		5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NA U.S. Army Command and General ATTN: ATZL-SWD-GD Fort Leavenworth, KS 66027-2301	Staff College	8. PERFORMING ORG REPORT NUMBER
9. SPONSORING / MONITORING AGE	ENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)
12. DISTRIBUTION / AVAILABILITY S	TATEMENT	_

12. DISTRIBUTION / AVAILABILITY STATEMENT

Approved for Public Release; Distribution is Unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

This research examines existing leadership theories, doctrine, and practices to determine the appropriateness of institutional preparation and development (education and training) of future Joint leaders for holistic, systemic, *problem management*--preparation for strategic leadership. The research addresses the topic of strategic leadership to find out the extent to which leadership doctrine prepares senior leaders and their advisors for the distinct environment of policy formulation and strategy development, so one can better understand 1) strategic leader behavior, 2) the extent to which it is idiosyncratic, and 3) how the Design approach could facilitate strategic leadership.

The totality of the requirements for strategic leaders are not articulated as finite, but instead draw upon the multiple frameworks that one develops from experience, informed intuition, training, broad education, and refined judgment. While this *descriptive* doctrinal approach for strategic leadership is more appropriate for the ambiguity, complexity and uncertainty of the strategic environment, it does not highlight the discontinuity of leader development from direct and organizational levels.

15. SUBJECT TERMS

Strategic Leadership, Personality, Problem Management

16. SECURIT	TY CLASSIFICATI		17. LIMITATION OF ABSTRACT		19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			19b. PHONE NUMBER (include area code)
(U)	(U)	(U)	(U)	48	

SCHOOL OF ADVANCED MILITARY STUDIES MONOGRAPH APPROVAL

Colonel David A. Danikowski, United States Army

Title of Monograph: Practicing Strategic Leadership Without a License

This monograph was defended by the degree candidate on 07 April 2010 and approved by the monograph director and reader named below.

Approved by:	
Dan C. Fullerton, Ph.D.	Monograph Director
Robert W. Tomlinson	Monograph Reader
Stephan J. Banach, COL, INF	_ Director, School of Advanced Military Studies
Robert F. Baumann, Ph.D.	_ Director, Graduate Degree Programs

Disclaimer: Opinions, conclusions, and recommendations expressed or implied within are solely those of the author, and do not represent the views of the US Army School of Advanced Military Studies, the US Army Command and General Staff College, the United States Army, the Department of Defense, or any other US government agency. Cleared for public release: distribution unlimited.

Abstract

PRACTICING STRATEGIC LEADERSHIP WITHOUT A LICENSE by COL David A. Danikowski, U.S. Army, 48 pages.

The great challenges of national security demand strategy to connect ends, ways, and means--to inform actions, allocate resources, and expose relationships between and among relevant stakeholders and the environment--to achieve national objectives. The security environment is volatile, uncertain, complex and ambiguous. It consists of political, social, economic, ethical, cultural, military, and technical conditions which must be considered and addressed if one aims to achieve a holistic outcome.

This research examines existing leadership theories, doctrine, and practices to determine the appropriateness of institutional preparation and development (education and training) of future Joint leaders for holistic, systemic, *problem management*--preparation for strategic leadership. The research addresses the topic of strategic leadership to find out the extent to which leadership doctrine prepares senior leaders and their advisors for the distinct environment of policy formulation and strategy development, so one can better understand 1) strategic leader behavior, 2) the extent to which it is idiosyncratic, and 3) how the Design approach could facilitate strategic leadership.

It has become common to attribute the differences of strategic leader performance to idiosyncrasy--the personality of leaders and strategic advisors. Experience in leading the tasks of *problem-solving* does not naturally (organically) develop future leaders to meet the needs of strategic leadership. This monograph addresses the question: Does leadership doctrine adequately prepare future leaders of the Joint Force for strategic leadership?

The totality of the requirements for strategic leaders are not articulated as finite, but instead draw upon the multiple frameworks that one develops from experience, informed intuition, training, broad education, and refined judgment. While this *descriptive* doctrinal approach for strategic leadership is more appropriate for the ambiguity, complexity and uncertainty of the strategic environment, it does not highlight the discontinuity of leader development from direct and organizational levels.

Table of Contents

Table of Contents	iii
INTRODUCTION	4
BACKGROUND	7
Doctrine	
Leadership	
Leadership Framework	
APPROACH FOR EXAMINATION	16
Leadership Requirements Model	16
Strategic Functions and Critical Tasks	
Strategy and Policy Process	
Strategic Environment	24
The Design Approach	26
Defining the Problem	31
ASSESSMENT AND EVALUATION	
CONCLUSION	39
Final Thoughts	42
BIBLIOGRAPHY	44

INTRODUCTION

The great challenges of national security demand strategy to connect ends, ways, and means--to inform actions, allocate resources, and expose relationships between and among relevant stakeholders and the environment--to achieve national objectives. The security environment is volatile, uncertain, complex and ambiguous. It consists of political, social, economic, ethical, cultural, military, and technical conditions which must be considered and addressed if one aims to achieve a holistic outcome. Leading and making decisions in the national security environment requires an understanding of strategic leadership.

Strategic leadership is not merely the realm of problem-solving--particularly not mechanical or technical problem-solving--where a malfunction requires fixing to achieve or restore acceptable operation. Even analytical problem-solving pre-supposes that a larger problem can be decomposed into parts--solving the problems of the parts then ameliorates the problem of the whole. The mess of security problems are not inclined to be separated into their constituent parts for study, examination, or solutions.² Experience in leading the tasks of *problem-solving* does not naturally (organically) develop future leaders to meet the needs of strategic leadership. Given this assertion, this monograph will address the question: Does leadership doctrine adequately prepare future leaders of the Joint Force for strategic leadership? Additionally, secondary questions include: 1) To what extent does military doctrine on leadership focus on *problem-solving*? 2) How might the Design approach facilitate strategic leadership?

¹ Stephen A. Shambach, ed., *Strategic Leadership Primer*, 2nd ed. (Carlisle Barracks, PA: Department of Command, Leadership, and Management, United States Army War College, 2004), iii. The strategic environment is characterized by the highest degrees of uncertainty, complexity, and ambiguity, as well as tremendous volatility (VUCA) due to the compression of time in which the leader must act.

² Jamshid Gharajedaghi, *Systems Thinking: Managing Chaos and Complexity* (Boston: Elsevier, 2006), 126. Formulation of the Mess describes the challenge of defining complex problems. Russell Ackoff, "Systems, Messes, and Interactive Planning," in *Redesigning the Future* (New York/London: Wiley, 1974), 6. "Every problem interacts with other problems and is therefore part of a set of interrelated problems, a system of problems.... I choose to call such a system a mess." The term "wicked problems" describes difficult or impossible problems with complex interdependencies, the effort to solve one aspect of a wicked problem may reveal or create other problems.

The disparity of performance of strategic leaders requires exploration and explanation. That which is not understood, is either discounted or relegated to a convenient category. It has become common to attribute the differences of strategic leader performance to idiosyncrasy--the personality of leaders and strategic advisors. This research addresses the topic of strategic leadership to find out the extent to which leadership doctrine prepares senior leaders and their advisors for the distinct environment of policy formulation and strategy development, so one can better understand 1) strategic leader behavior, 2) the extent to which it is idiosyncratic, and 3) how the Design approach could facilitate strategic leadership.

The doctrinal requirements for strategic leaders are not articulated as finite, but instead draw upon the multiple frameworks that one develops from experience, informed intuition, training, broad education, and refined judgment. While this *descriptive* doctrinal approach for strategic leadership may be more appropriate for the ambiguity, complexity and uncertainty of the strategic environment, it does not highlight the discontinuity of strategic leader development from direct and organizational levels. Making the cognitive leap to the challenges of strategic leadership is largely left to the individual leader and advisor.

As many officials describe their responsibilities, interactions, relationships, and products, they mention personality and idiosyncrasy that impacts the context of their jobs.³ The initial focus of this research was on decomposing the often-referenced personality and idiosyncrasy of senior leaders to construct a roadmap of personality traits that would facilitate objectivity by negating the impacts of idiosyncrasy. However, the existence of a few archetypes of personality, even intimate knowledge of them and the biases they influence, does not account for the variety of

³ The following statements are representative of what officials can be heard to say: "Personality always plays in meetings." "At best it is idiosyncratic at the national level." "There are big egos in the suite chairs." "Personality plays in all interaction." "It boils down to judgment/personality." "It is personality-driven leadership." "She did it by force of personality...we are all Type-As here."

behaviors and attitudes that comprise the strategic context.⁴ When advocating understanding of the operational environment, the new Field Manual 5-0, Operations Process, states, "any method that does not account for the dynamic and idiosyncratic nature of human complexity may reduce the effectiveness of an operation." In other words, human complexity is part of the context. The environment of policy formulation and strategy development is laden with human complexity for which one must account to achieve understanding. To neglect such an accounting disregards a measure of the environment that could prove decisive. Strategic leaders and advisors must understand that, in the words of Field Marshal William Slim, "command is an extension of personality."6

Looking at problems objectively (taking personality out) seems like a logical necessity to define a problem and devise solutions. The essence of problem-solving is to define the problem; however, strategic leadership is not merely the realm of problem-solving. The challenge of military leadership doctrine is that it does focus on problem-solving.⁷ This focus has utility in direct leadership and even organizational leadership--which accounts for 98 percent of military leaders. The paradox lies in that there is no natural harmony among technical, tactical, and operational experience [of problem-solving] and the context of strategy [and strategic leadership]." Reliance on mechanistic understanding is therefore doomed to fail. 10

⁴ Isabel Briggs Myers and Peter B. Myers, Gifts Differing: Understanding Personality Type (Palo Alto, CA: Davies-Black Publishing, 1980), and Carl G. Jung, "Psychological Types" in The Basic Writings of C.G. Jung (New York: Random House, 1923): 88-111.

⁵ U.S. Army, Field Manual 5-0, Operations Process (Washington DC: Government Printing Office, 2009), 3-3.

⁶ William Slim, "Command in War" (lecture, Marine Corps Command and Staff College,

Quantico, VA, 1952).

Headquarters, Department of the Army. Field Manual (FM) 6-22. Army Leadership: Competent, Confident, and Agile (Washington DC: Government Printing Office, 2006), 3-9, 6-1, 10-9, and 11-3.

⁸ Shambach, 2. "The reality is that only *one or two percent* will ever attain strategic leadership rank or position. But, anyone in a staff position working for a strategic leader should be well-trained as a strategic thinker or they cannot adequately support the leader."

⁹ Edward N. Luttwak, Strategy: The Logic of War and Peace (Cambridge, MA: The Belknap Press of Harvard University Press, 2001), 2.

¹⁰ Zvi Lanir and Gadi Sneh, "The New Agenda of Praxis" (Tel Aviv: Lanir-Decision and Learning Systems, 2000), 8.

The Design approach is a holistic approach to *problem management*. Leading the Design approach approximates effective strategic leadership. This research will examine existing leadership theories, doctrine, and practices to determine the appropriateness of institutional preparation and development (education, training, and experience) of future Joint leaders for holistic, systemic, *problem management*--which is preparation for strategic leadership. The big ideas of Design--learning, difference, systems, and social creation--lead to adaptation, which is necessary when dealing with networks and complex systems. ¹¹ The Design approach can assist by effectively preparing strategic leaders to understand the distinct environment in which strategic leaders work and the special considerations required.

The art and science of the operations process emphasizes the science at the tactical level, and to a lesser extent, at the operational level. Science is a factor at the strategic level; however, the art is predominant when concrete data gives way to an approach consisting of philosophy, ideology, sociology, psychology, and inter-personal relationships. The necessary wisdom at the strategic level is more art than science, and "artistry is an exercise of intelligence." ¹²

BACKGROUND

The existing literature on leadership and management, strategy and policy, geopolitics, social sciences, and personality types is lively and relevant. The published works on Design and the emerging concepts and doctrine regarding the military application of Design allow the possibility that this research could identify knowledge gaps in the field. Earlier research and publication of a thesis on organizational leader development ¹³ and a monograph on personality

¹¹ Antoine J. Bousquet, *The Scientific Way of Warfare: Order and Chaos on the Battlefields of Modernity* (New York: Columbia University Press, 2009), 29.

Donald A. Schön, *The Reflective Practitioner: How Professionals Think in Action* (Cambridge: Basic Books, 1983), 26.

¹³ David A. Danikowski, "The Challenge of Organizational Leader Development for the Army After Next" (master's thesis, US Army Command and General Staff College, 2000).

and the planning process¹⁴ inform this work, and served as the motivation to inquire about strategic leadership doctrine and the Design approach. Strategy and policy examples are merely representative to illustrate complexity at the level of strategic leadership, not intended to advocate particular positions. The major focus of the research on leadership doctrine is on the US Army, though applicability to other services is not neglected, and among strategic leaders and advisors (political appointees, career civilians, and the military) the focus is on commissioned officers.¹⁵

It is possible in a twenty-year career, to remain steadfastly in problem-solving organizations, only vaguely aware that the experience and military education through intermediate levels is ill-suited to strategic contexts. Leading the tasks of problem-solving does not organically develop future leaders to meet the needs of strategic leadership. The strategic leader, theoretician, and practitioner must master the conceptual, technical, and interpersonal realms. The strategic leader also requires a nuanced set of skills that can be applied in differing contexts. According to David Snowden and Mary Boone in their *Harvard Business Review* article on "A Leader's Framework for Decision Making," there are five contexts defined by the nature of the relationship between cause and effect. "Four of these [contexts]—simple, complicated, complex, and chaotic—require leaders to diagnose situations and to act in contextually appropriate ways. The fifth—disorder—applies when it is unclear which of the other four contexts is predominant." Leadership doctrine does not provide a framework in which to readily determine the extant context.

-

¹⁴ David A. Danikowski, "Personality and the Planning Process" (monograph, School of Advanced Military Studies, 2001).

¹⁵ FM -6-22, 3-7. "Strategic leaders include military and Army civilian leaders at the major command through Department of Defense (DOD) levels. The Army has roughly 600 authorized military and civilian positions classified as senior strategic leaders. Strategic leaders are responsible for large organizations and influence several thousand to hundreds of thousands of people. They establish force structure, allocate resources, communicate strategic vision, and prepare their commands and the Army as a whole for their future roles."

¹⁶ Shambach, Strategic Leadership Primer, 2.

¹⁷ David J. Snowden and Mary E. Boone, "A Leader's Framework for Decision Making," *Harvard Business Review*, (Nov 07). http://hbr.org/relay.jhtml?name=itemdetail&referral=4320&id=R0711C (accessed Jan 10, 2010).

There are two principle roles for the strategic leader: 1) Leadership of the institution (the entire US Army) or at the combatant command level¹⁸ and 2) Military advisor to civilian authorities and participant in policy formulation and strategy development. In these roles, the principal senior leader may only be the most senior general or flag officer, but the necessity for strategic leadership development extends to all those who knowledgeably advise and assist that senior individual. This broader focus of strategic leader development is consistent with requirements at the organizational level in which field-grade officers advise and staff all organizational-level headquarters organizations.

The first consideration is the context in which strategic military organizations are employed. According to the *Capstone Concept for Joint Operations*, "the fundamental purpose of military power is to deter or wage war in support of national policy." American military doctrine defines the military contribution to security strategy in the concept of unified action—"the synchronization, coordination, and/or integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort." While unified action can apply at the organizational level, in the context of national security, the added complexity of multiple organizations, joint services, interagency contributions, and other entities will nearly always characterize the challenges of strategic leadership.

Joint leaders exercise Battle Command to drive the operations process which consists of Planning, Preparation, Execution, and continuous Assessment.²¹ The major activities of Battle

¹⁸ The combatant commands are: regional: Northern Command, Central Command, Southern Command, European Command, Pacific Command, and Africa Command, and functional: Joint Forces Command, Strategic Command, Transportation Command, and Special Operations Command.

¹⁹ Department of Defense, *Capstone Concept for Joint Operations (CCJO)*, (Washington D.C.: Government Printing Office, 2009), 1.

²⁰ Department of Defense, *Joint Publication (JP) 1: Doctrine for the Armed Forces of the United States*, (Washington DC: U.S. Government Printing Office, chg 1, 20 March 2009), GL-11. This version supersedes JP 0-2, *Unified Action Armed Forces (UNAAF)*, 10 July 2001.

²¹ U.S. Army, *Field Manual (FM) 3-0: Operations* (Washington DC: Government Printing Office, 2008), 5-1.

Command are: Understand, Visualize, Describe, Direct, Lead, and Assess. Commanders perform these activities to lead forces toward mission accomplishment. "Battle command is informed by intuition and guided by professional judgment gained from experience, knowledge, education, and intelligence," yet these factors are likely as varied as the individuals encountering them. Exercising battle command is a function of command and control (C2). "C2 is a commander and a C2 system—a combination of people, organization, technological means and resources, and procedures." In the operational (warfighting) role, C2 is familiar to all military officers. In the strategic military advisor role, and as a participant in national policy formulation and strategy development, C2 becomes problematic. The challenge is stated well in Field Manual 5-0, *Army Planning and Orders Production*, "even the most effective exercise of C2 cannot eliminate uncertainty, impose a precise, mechanistic, predictable order on operations; or overcome an inferior plan." Likewise, C2 does not apply when a senior leader must work with others whom he does not command or exercise authority over, but must rely on other "activity to mobilize adaptation" to accomplish a task or perform a function.

To examine military leadership doctrine and leader development for strategic leaders, it is necessary to establish or adopt a framework to limit research to relevant matters. The establishment of the Army, of what it must be capable, and that it shall be organized, trained and equipped for prompt and sustained combat is codified in United States Code:

It is the intent of Congress to provide an Army that is capable, in conjunction with the other armed forces, of **preserving the peace and security**...of the

²² U.S. Army, *Field Manual 5-0, Army Planning and Orders Production* (Washington DC: Government Printing Office, 2005), vii and *FM 3-0*, 5-2.

²³ Ibid., vii.

²⁴ U.S. Army, *Field Manual 6-0, Command and Control* (Washington DC: Government Printing Office, 2003), x.

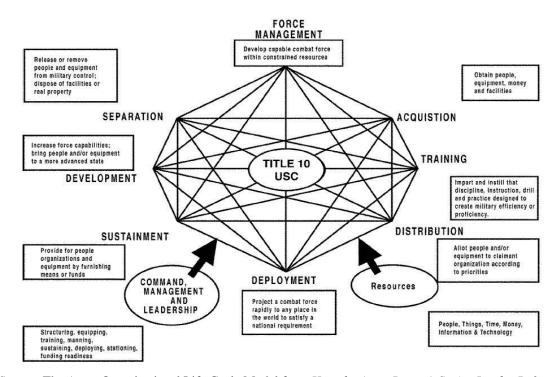
²⁵ FM 6-0, i. In the scope paragraph of FM 6-0 it states, " FM 6-0 provides doctrine on C2 for tactical Army echelons (corps and below). FM 6-0 establishes mission command as the C2 concept for the Army. It focuses on the premise that commanders exercise C2 over forces to accomplish missions."

²⁶ FM 5-0, 1-3.

²⁷ Ronald A. Heifetz, *Leadership Without Easy Answers* (Cambridge: Harvard University Press, 2003), 27.

United States, supporting the national policies; implementing national objectives; and overcoming any nations responsible for aggressive acts that imperil the peace and security of the United States.... It shall be **organized**, **trained**, **and equipped** primarily for prompt and sustained combat incident to operations on land. It is responsible for the **preparation of land forces necessary for the effective prosecution of war**.²⁸

The Army provides organizations comprised of well-trained people with superior equipment, led by competent leaders employing sound doctrine while operating to accomplish the mission and improving the organization. The Army is a large, complex organization and manages many interrelated processes with an organizational lifecycle view. "The Army Organizational Life-Cycle Model graphically captures the continuous cycle of developing, employing, maintaining, and eliminating organizations." 29



Source: The Army Organizational Life Cycle Model from *How the Army Runs: A Senior Leader Reference Handbook* (Carlisle Barracks, PA: United States Army War College, 2007), 9.

²⁸ Title 10, United States Code, Section 3062 a and b.(**emphasis added**). http://www.law.cornell.edu/uscode/10/usc_sec_10_00003062----000-.html (accessed January 11, 2010).

²⁹ US Army War College, *How the Army Runs: A Senior Leader Reference Handbook* (Carlisle Barracks, PA: United States Army War College, 2007), 9.

Generally, the model depicts the life cycle of organizations, people, facilities, and equipment from force management through (clockwise) to separation. Force Management is the first phase of the model and involves 1) concept development, 2) capabilities requirements generation, 3) *force development*, 4) organizational development, 5) force integration and 6) resourcing. Force development determines **doctrine**, organizations, training, materiel, **leadership** and education, personnel, and facilities (DOTMLPF) capabilities requirements and translates them into programs and structure to accomplish Army missions and functions. ³⁰

It is within the framework of the Organizational Life Cycle Model that this research will evaluate strategic leadership doctrine and its suitability in preparing future leaders of the Joint Force for strategic leadership. This holistic review and evaluation acknowledges that doctrine and leadership education permeate all functions regarding potential future strategic leaders--from commissioning through separation at the conclusion of a service career. Traditional collective training, professional educational, and leader development fall under the Development function of the Organizational Life Cycle Model. The development of potential strategic leaders begins with accession training and continues throughout the entire period of service. It includes institutional training, self-development, leader development and supporting programs such as the counseling, evaluation, promotion, and command selection systems.³¹

Doctrine

Any evaluation of the suitability of doctrine must begin with a definition of doctrine.

According to the Joint Warfighting Center Doctrine Group, "doctrine is the fundamental principle that guides the operations and functions of the organization toward common goals and

³¹ How the Army Runs, 296

12

³⁰ US Army War College, *How the Army Runs: A Senior Leader Reference Handbook* (Carlisle Barracks, PA: United States Army War College, 2007), 10.

objectives."³² The body of doctrine includes the documents that formalize an organization's strategy, policy, and procedures. These documents shape the work environment and organizational culture and codify authority, roles, and responsibilities. Doctrine provides a shared way of thinking about the problems faced by the organization, and provides the context and linkage between the top levels of the organization and the tactics, techniques, and procedures (TTPs) required at implementation levels.³³

Both concepts and doctrine describe how an organization uses given capabilities in a set of circumstances to achieve a stated purpose "There is a close and complementary relationship between concepts and doctrine. In general terms, a concept contains a notion or statement that expresses how something might be done." ³⁴ Concepts can explore new operational methods, organizational structures, and employment, while doctrine describes operations with extant capabilities, and is subject to current policy and constraints. Joint concepts provide the basis for joint experimentation; joint doctrine provides the basis for training and actual operations.³⁵ Doctrine is authoritative and standardized such as the Joint Operations Planning Process (JOPP)³⁶ and the Military Decision Making Process (MDMP).³⁷ Leadership doctrine acknowledges that "societal change, evolving security threats, and technological advances require an ever-increasing degree of adaptability."³⁸

³² Rick Rowlett, "Concepts to Doctrine: Integrating the New Ideas" *Joint Warfighting Center* Doctrine Group Newsletter 11, No. 2, (October 2003). http://www.dtic.mil/doctrine/jel/comm_per/ common_perspective.htm (accessed January 10, 2010). $\overline{\ }^{33}$ Ibid., 8.

³⁴ Ibid.

³⁵ Ibid., 8-9.

³⁶ JP 5-0, I-11 and chapter III. JOPP is the doctrinal process for joint operations planning which includes: Initiation, Mission Analysis, Course of Action (COA) Development, Analysis, Comparison, and Approval, followed by plan or order Development.

³⁷ FM 5-0, A-1. MDMP is the Army doctrinal planning process which includes: Mission Analysis, Course of Action (COA) Development, Analysis, Comparison, and Approval, followed by plan or order Development.

³⁸ FM 6-22, 2-1.

Leadership

In general, doctrinal documents state: "1) an organization's objectives (who we are) 2) general concepts of how the organization performs its mission (what we [should] do) 3) concerns and cautions in carrying out the mission (how we should do it) and 4) historical examples (how we did it in the past)." The Army's leadership doctrine follows a similar construct by describing what leaders should BE, what they should KNOW, and what they should DO. The most important aspect of leadership doctrine is the leader. There are critical *attributes* that leaders can apply to reach their full professional potential from direct leader to strategic leader. Additionally, "leaders apply character, presence, intellect, and abilities to the *core leader competencies* while guiding others toward a common goal and mission accomplishment. 42

Leadership encompasses the selection, development, performance, and assessment of those individuals exercising authority in an organization. This description is adequate for direct and organizational leadership--which accounts for the vast majority of leader roles in the military. Military officers are not brought into the service based on their potential for strategic leadership several decades into the future. Referring to the two principle roles for the strategic leader, "strategic leadership at the Army's highest level is significantly different in scope, effect, and execution than leadership at lower levels." What is consistent among the levels of leadership is that "effective leadership is a function of the interaction of the leader, those being led or influenced (inside and outside of the organization) and the situation or circumstances facing the organization."

-

³⁹ Department of Defense Office of the Deputy Inspector General for Inspections & Policy, *The Management Decision Model (MDM)* (Arlington, Virginia: Government Printing Office, 2007), 6.

⁴⁰ FM-6-22, 1-1.

⁴¹ Ibid., 4-1. The attributes are Character, Presence, and Intellectual capacity.

⁴² Ibid., 7-3. The core leader competencies are what a leader does: Leads, Develops, and Achieves.

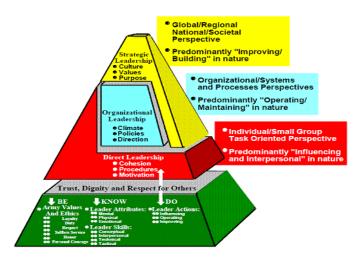
⁴³ 1) Leadership of the entire institution or at the combatant command level and 2) Military advisor to civilian authorities and participant in national policy formulation and strategy development.

⁴⁴ Shambach, Strategic Leadership Primer, iii.

⁴⁵ Ibid., 2.

Leadership Framework

Models of leadership differentiate levels of leadership based on functions and tasks. For simplicity, the Army Leadership Framework depicts three levels of leadership--direct leadership, organizational leadership, and strategic leadership. The top level of the framework is strategic leadership. The "global/regional/national/societal perspective" establishes that strategic leaders work in uncertain environments that present highly complex problems affecting or affected by events and organizations outside the Army. For example, the actions of a combatant commander often have critical impacts on global politics, and joint/interagency/inter-governmental and multinational (JIIM) operations affect both inside the Army as well as impact the wider societal environment. The "predominantly improving and building in nature" statement of the model means that strategic leader decisions to align and build the institution affect more people, commit more resources, and have wider-ranging consequences in space, time, and political impact than do decisions of organizational and direct leaders--which are predominantly operating, maintaining, influencing and interpersonal in nature. 46



Source: The Army Leadership Framework from *How the Army Runs: A Senior Leader Reference Handbook* (Carlisle Barracks, PA: United States Army War College, 2007), iii.

15

⁴⁶ Ibid, iv-v.

Advising and participating in policy formulation and strategy development in a democracy, and particularly in the constitutionally-divided political system of America, presents additional challenges. While the military is subordinate to the authority of the President and the Secretary of Defense, the process of resource allocation belongs to the Congress. Strategic leaders apply all core leader competencies⁴⁷ they acquired as direct and organizational leaders, while further adapting them to the more complex realities of the strategic environment. The strategic environment includes all the institutional domains, enterprises, and functions of the Army and its components, so strategic leader decisions must take into account such things as congressional hearings, budgetary constraints, relations with the national and international public, systems acquisition, civilian programs, research and development, structure, systems, culture and inter-service cooperation.⁴⁸

APPROACH FOR EXAMINATION

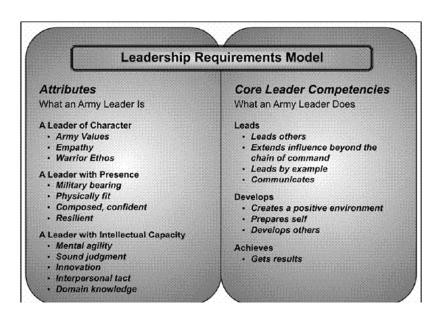
Leadership Requirements Model

Current leadership doctrine establishes leadership requirements in terms of attributes (what a leader is) and core competencies (what a leader does) in the Leadership Requirements Model. These attributes and competencies have been developed over multiple iterations of the doctrine. The attributes are: a leader of character, a leader with presence, and a leader with intellectual capacity. The core leader competencies are: one who leads, develops and achieves.⁴⁹

⁴⁷ The core leader competencies are: Leads, Develops, and Achieves. The purpose in establishing competencies for leaders should be to better define what **functions** leaders must perform to make themselves and others in their organizations effective. Many competency definitions include reference to clusters of knowledge, skills, abilities, and traits that lead to successful performance. For more see Jeffrey D. Horey, et al, in *Leadership Competencies: Are we all saying the same thing?* (Cocoa Beach, FL: US Army Research Institute, 2001).

⁴⁸ Shambach, *Strategic Leadership Primer*, 3.

⁴⁹ FM 6-22, 2-4.



Source: Leader Requirements Model from Field Manual (FM) 6-22. Army Leadership: Competent, Confident, and Agile (Washington DC: Government Printing Office, 2006), 2-4.

The attributes are common--without regard to the level of leadership. Leaders of Character are essential, for character determines who they are and how they act (morally, ethically, and based on values and principles) driven by Army Values, Empathy, and the Warrior Ethos. ⁵⁰ A Leader with Presence demonstrates military bearing, presents a professional image of authority, has sound health, strength, and endurance which sustain emotional health and conceptual abilities under prolonged stress, confidence in their ability to succeed, and resilience-showing a tendency to recover quickly from setbacks, shock, injuries, adversity, and stress while maintaining a mission and organizational focus. ⁵¹ A Leader with Intelligence Capacity possesses mental agility to anticipate and adapt (to fight the enemy not the plan) and the ability for critical reasoning, which includes judgment, innovation, interpersonal tact, and domain knowledge. ⁵²

17

⁵⁰ Ibid., 4-4. The Army Values are loyalty, duty, respect, selfless service, honor, integrity, and personal courage.

⁵¹ Ibid., 5-1.

⁵² Ibid., 6-1.

Strategic leaders apply additional knowledge, experience, techniques, and skills beyond those required by direct and organizational leaders. In the strategic environment of extreme complexity, ambiguity, and volatility, strategic leaders must think in multiple time periods and apply more adaptability and agility. To merely focus on these doctrinal attributes and competencies as they apply to strategic leaders may prove unfulfilling. For this research to advocate that strategic leaders need more character, presence, and intellectual capacity, or that they must lead, develop, and achieve more than they did in direct and organizational leader roles, would ring hollow indeed. A more specific look at strategic leader roles, tasks, and functions is required. The strategic leader roles are specific look at strategic leader roles, tasks, and functions is

Strategic Functions and Critical Tasks

The Army differentiates functions and tasks vertically. The Army executes thousands of functions and tasks in the institutional role to organize, train, and equip the force. These functions and tasks produce value-added outputs at the strategic, operational and tactical levels. Efficiency and effectiveness demand that each level perform essential and unique tasks or perform critical integrating functions. The three levels (strategic, operational, and tactical) are further divided into eight levels. ⁵⁵ The top (strategic) levels are shown in the chart.

⁵³ FM 6-22, 12-1

⁵⁴ The two principle roles of the strategic leader are 1) Leadership of the institution (the entire US Army) or at the combatant command level and 2) Military advisor to civilian authorities and participant in national strategy and policy formulation.

⁵⁵ How the Army Runs, 26.

Functions	Critical Tasks
	Level VIII (SA & CSA)
> Sets the Direction of the whole Enterprise, and > Assigns Major Areas of Accountability to Each Direc	ct Subordinate
Le	vel VII (USA; VCSA; ASA; GEN)
S > External Affairs Policy Application Governance R > Resourcing > Continuous Alignment E G	 Set Vision: Structure, Systems and Processes Define Mission Establish Values Create Culture Formulate Enterprise Projects Initiate Change
	Level VI (PDASS; SES-4; LTG)
> Policy Formulation > Strategy Development > Program Anaylsis & Integration > Best Business Practices (Networking) > (Command Direct Reporting Units)	 Maintain Global Awareness (Political Environmental, Social, Technical, Informational) Manage Portfolios Allocate Resources Design: Structure, Systems, and Processes

Source: Differentiation of Army Hierarchical Functions and Tasks from *How the Army Runs: A Senior Leader Reference Handbook* (Carlisle Barracks, PA: United States Army War College, 2007), 27.

At the strategic level of the organization, the top level (Level VIII: the Secretary of the Army and the Chief of Staff of the Army) sets the direction for the total enterprise and assigns major areas of accountability to subordinate organizations. The Army and Air Force Chiefs of Staff, along with the Chief of Naval Operations and the Commandant of the Marine Corps, also serve as members of the Joint Chiefs of Staff with the Chairman of the Joint Chiefs of Staff. The other most senior level (Level VII: the Under Secretaries, Vice Chief of Staff, Assistant Secretaries, and other four-star Generals) sets the vision, structure, systems, and processes; defines missions; establishes values; creates culture; and formulates enterprise projects. Level VII strategic leaders function in external affairs, policy application, governance, resourcing, and continuous organizational alignment of the major components of the institution and work with

long time horizons of 15 years or more.⁵⁶ All combatant commands are commanded by four-star flag officers (Generals or Admirals),⁵⁷ and Title X commanders of service headquarters are also Level VII strategic leaders.⁵⁸

Level VI leaders also operate at the strategic level (Principle Deputy Assistant

Secretaries, Senior Executive Service (SES) level four civilians, and three-star Lieutenant

Generals) and perform the tasks to maintain global awareness (in political, environmental, social, technical, and informational domains), manage portfolios, allocate resources, and design the structure, systems, and processes that support the vision for the Nation's defense for the next fifteen years and beyond. Level VI leaders function in policy formulation, strategy development, program analysis and integration, and networking within the organization and with industry for best business practices. Lieutenant Generals (or Vice Admirals) also command Direct Reporting Units to the Service Departments and generally serve as commanders of Joint Task Forces. ⁵⁹

At the operational level, leaders have traditionally provided the leadership of Divisions and Brigades. Level V: SES-5 civilians and two-star Major Generals perform the tasks to manage operational units, manage resources, integrate cross-functions, create supportive climate, and formulate operational unit projects. They work in the functions of strategy implementation, identifying customer needs, developing business plans and programs, and implementing continuous improvement. ⁶⁰

Level IV leaders: SES-6 and GS-15 civilians, Brigadier Generals and Colonels, work at the operational-level to manage people, processes, activities and resources to achieve goals and

⁵⁶ Ibid

⁵⁷ The combatant commands are: regional: Northern Command, Central Command, Southern Command, European Command, Pacific Command, and Africa Command, and functional: Joint Forces Command, Strategic Command, Transportation Command, and Special Operations Command.

⁵⁸ Title X service headquarters include the Army Training and Doctrine Command (TRADOC), Forces Command (FORSCOM), and Army Materiel Command (AMC); Naval Fleet Forces Command, and Air Combat Command (ACC), etc.

⁵⁹ How the Army Runs, 28.

⁶⁰ Ibid., 28

objectives; integrate functions, and measure customer satisfaction. Level IV leaders work in the functions of program execution, meeting customer needs, implementing continuous improvement, and managing resources. Levels IV and V transform the strategic vision of Level VII leaders into a three to six-year framework within which subordinate organizations implement programs and training plans to create the conditions for successful activities at the tactical levels.⁶¹

The lower levels (Levels III, II, I--the tactical level) produce the products and services (direct outputs) consumed by the customer. For example, "the output of a service school is a trained Soldier. The output of a combined arms battalion is occupied and controlled territory." Critical tasks at the tactical level are to increase productivity, ensure quality, eliminate waste, and apply lean principles. Aside from the function of producing direct outputs, the tactical level functions directly with customers; they manage to budget and implement continuous improvements. In a tactical command situation, the direction of work flow and its outputs are directed down to lower levels because that is where production occurs. It is at these lowest levels of leader activity where the plurality of leadership doctrine focuses attention. The institutional preparation and development through education, training, and experience produces leaders who become expert in tactical functions and tasks (Level I, II, and III), some small percentage learn the operational functions and tasks (Level IV and some V), and formal leadership doctrine is nearly silent on strategic functions and tasks (Levels, VI, VII, and VIII).

Work fundamentally changes at the strategic level. Individuals doing work at the strategic levels produce outputs (services or products), but their outputs and work are directed at supporting a more senior Principal. The work at Level VI supports the outputs of Level VII.

The outputs might be data analyses (services) or reports (products). Level VI may also prescribe

⁶¹ Ibid.

⁶² Ibid., 29.

⁶³ This final sentence is the genesis of the title for this monograph "Practicing Strategic Leadership without a License." The gates and qualifications, certification and selection of leaders in tactical and operational levels (while not a licensing process) provides some assurance of adequate preparation. Potential success at the strategic level is not necessarily based on success at lower levels.

tasks to Level V directorates that have been established to assist the Level VI Principals in carrying out their work. The Level V output in this case might be drafts of specifications, directives, or programs ⁶⁴ The fact that much of this sounds alien to most military officers is evidence that preparation for strategic leadership is not widespread. Whether it is *wide enough* for the small numbers who will become strategic leaders or their advisors is a judgment best saved for later in this paper.

Strategy and Policy Process.

Strategic leaders create their work on a broad canvas that requires broad technical skills and mastery of strategic art. Broadly defined, strategic art is "the skillful formulation, coordination, and application of ends, ways, and means to promote and defend the national interest." Strategic leaders exert influence primarily through staffs and trusted subordinates and thus they "must develop strong skills in selecting and developing talented and capable leaders for critical duty positions." 66

Grand strategy is a nation's basic approach to political-military security. The policy and strategy apparatus for the security of the United States begins with the National Security System in which the "National Security Council advises and assists the President on national security and foreign policies and also serves as the President's principal arm for coordinating these policies among various government agencies." Presidential Policy Directive 1 (PPD-1) established the National Security Council (NSC) structure for the Obama administration. The Secretary of

⁶⁴ How the Army Runs, 28.

⁶⁵ FM 6-22, 12-10.

⁶⁶ Ibid, 3-8.

⁶⁷ Alan G Whittaker, Frederick C. Smith, & Elizabeth McKune, *The National Security Policy Process: The National Security Council and Interagency System.* (Research Report, November 2007 Annual Update). (Washington, D.C.: Industrial College of the Armed Forces, National Defense University, U.S. Department of Defense, 2007). 3.

⁶⁸ Barack H. Obama, Presidential Policy Directive 1 (PPD-1). Organization of the National Security System. (Washington DC: White House, 13 Feb 2009), 4.

Defense (SECDEF) and the Chairman of the Joint Chiefs of Staff (CJCS) serve as advisors to the President.⁶⁹

The 1986 Goldwater-Nichols Act profoundly changed the relationships among the Services and with the organizations of the Office of the Secretary of Defense (OSD), the Combatant Commands (COCOMs), and the Joint Chiefs of Staff (JCS). The CJCS and JCS were given additional responsibilities; the COCOMs were given greater authority and responsibilities to execute their missions, and Services and OSD realigned specific responsibilities and made organizational changes to include some that involved greater civilian oversight and control. The expanded requirement for leadership without authority negates some of the formative experience of Command and Control (C2) which characterize most officer development. No longer is the most senior officer the decision-maker whom all others follow. In the strategic leader realm, influence may be based on the power of ideas, compelling communication, the resources available, the collegiality of the group, or other factors beyond the control of the strategic leader-a clear departure from operational command and leadership.

The primary political task of the policy process is to determine clear national strategic objectives--broadly expressed diplomatic, informational, military, and economic conditions that should exist at the conclusion of a campaign or operation.⁷¹ To participate in policy formulation and strategy development, military strategic leaders utilize the processes of the Department of Defense (DOD), the Joint Staff, and Service strategic planning systems. These systems include:

⁶⁹ Ibid.

⁷⁰ Title IV, Public Law 99–433, Goldwater-Nichols Department of Defense Reorganization Act of 1986.

⁷¹ JP 1, I-20. The supported CCDR must work closely with the civilian leadership to ensure a clearly defined national strategic end state is determined. Thinking of this "end state" as an integrated set of aims is useful because national strategic objectives usually are closely related rather than independent. The supported CCDR often will have a role in achieving more than one national strategic objective. Some national strategic objectives will be the primary responsibility of the supported CCDR, while others will require a more balanced use of all instruments of national power, with the CCDR in support of other agencies.

the Joint Strategic Planning System which articulates guidance for the Joint Force, the Joint Operation Planning and Execution System (JOPES) which provides specific direction to operational units, and the Planning, Programming, and Budgeting and Execution System (PPBES) which aligns resources for the services with particular functions and mission. According to the Army War College, the strategic leader role in this process is to be the master of the strategic art, which is defined as "the skillful formulation, coordination, and application of ends (objectives), ways (courses of action) and means (supporting resources) to promote and defend the national interests."

The strategic leader thus fulfills three overlapping roles: The strategic theorist develops strategic concepts and theories, integrates the elements of power, teaches the strategic art, and **formulates** the ends, ways, and means. The strategic leader provides vision and focus, masters inter-personal leadership skills, inspires others to think and act, and **coordinates** the ends, ways, and means. The strategic practitioner develops and executes strategic plans, employs force and other dimensions of national power, unifies activities through command and leadership skills, grasps all levels of war and strategy, and **applies** ends, ways, and means.

Strategic Environment

America's complex national security environment requires an in-depth knowledge of the diplomatic, informational, military, and economic instruments of national power, as well as the interrelationships among them. The strategic context includes "strategy, objectives, accountability, key stakeholders, priorities, constraints, and evaluation criteria." The strategic context is not limited to a macro-Joint Intelligence Preparation of the Operational Environment (JIPOE)--formerly known as Intelligence Preparation of the Battlefield (IPB). America's

⁷² FM6-22, 12-6.

⁷³ Shambach, Strategic Leadership Primer, 1.

⁷⁴ DOD IG, Management Decision Model, 5.

institutions, culture, values, and businesses, international laws, treaties, frameworks, and geopolitics, environmental conditions, social considerations, technical capabilities, and the entire informational domain impact the national level. Even when national security is not threatened, policy formulation and strategy development must account for resources, structure, systems, and processes that build and sustain the institution (hence the reason this research began with the Organizational Life Cycle Model). According to leadership doctrine, "leaders must not only know themselves and their own organizations, but also understand a host of different players, rules, and conditions."⁷⁵ The simple admonition to know oneself and the organization at the strategic level demands that preparation for strategic leadership not be left to providence--a chance assignment, a particular mentor, or extensive reliance on self-development.

Though the world continues to become more connected by technology and economic growth, it remains very diverse and divided by religions, cultures, living conditions, education, resource scarcity and distribution, and health. The challenges of force management, acquisition, training, distribution, deployment, sustainment, and development through separation must always remain in the minds of strategic leaders. ⁷⁶ Whether the issue is meeting a threat or global positioning of forces, there is no easy answer within the political sphere of influence. For example, "maintaining presence in foreign countries through a careful mix of diplomatic and military arrangements remains an important challenge."⁷⁷ There is no static strategic environment to serve as a template from which to analyze strategic leaders. The only certainty is that each problem facing strategic leaders will require intelligent, creative, and unique approaches. The concept of Design offers such a line of attack.

⁷⁶ How the Army Runs, 10. The functions of the Organizational Life Cycle Model. ⁷⁷ FM 6-22, 10-4.

The Design Approach

There is no shortage of problems in the world--natural disasters, hunger and famine, disease and resource insecurity, political unrest and war--to name but a few. The ability of man to cope with these problems is great indeed. The ability of man to solve these problems is flawed and misunderstood based on the simple definitions of solve and problem. A problem is "a situation that presents uncertainty, perplexity, or difficulty." ⁷⁸ To solve is "to find *the* answer (as in the problem of a puzzle) or work out *the* solution (as in a mathematics problem)."⁷⁹ There is a finality to solving a puzzle--all the pieces fit into place, or solving a math problem, the answer is worked out. The best one can hope to achieve in social, political, economic, and ecological fields is transitory satisfaction with dynamic conditions--that is all, and conditions are not static. Man cannot solve all problems, but can act to change conditions (albeit perhaps temporarily) to a satisfactory state, or adapt to align with conditions (or a combination of acting to change conditions and adapting to the changes) to operate within a zone of tolerance.

The Design approach is a holistic approach to *problem management*. If a problem cannot be solved, then problem management is determining actions to change conditions and adapting to the new conditions. Design is an approach "for critical and creative thinking that commanders use to understand the operational environment, make sense of complex problems, and develop broad approaches to resolve or manage those problems."80 In terms of driving the operations process through battle command, Design is critical and creative thinking for understanding, visualizing, and describing complex problems and the broad approaches to resolve them. The leader attribute of intellectual capacity best captures the required thinking for strategic leaders and design. Leaders require "critical thinking to capture the reflective learning essential to

 $^{^{78}}$ The American Heritage Dictionary, 2nd ed. (Boston: Houghton Mifflin Company, 1982), 987. 79 Ibid., 1164.

⁸⁰ FM 5-0, v.

Design and creative thinking which involves thinking in new, innovative ways while capitalizing on imagination, insight, and novel ideas."81

It is in this way that leading the Design approach approximates effective strategic leadership. Initiating change is a Level VII critical task for strategic leaders. The creative thinking required to formulate enterprise projects and the entire policy formulation function are about generating desirable change. To manage complex problems, strategic leaders may change their organizations. Thus, generating change has two components: 1) actions within the operational environment to change conditions and 2) the adaptation of the organization to facilitate those actions. ⁸²

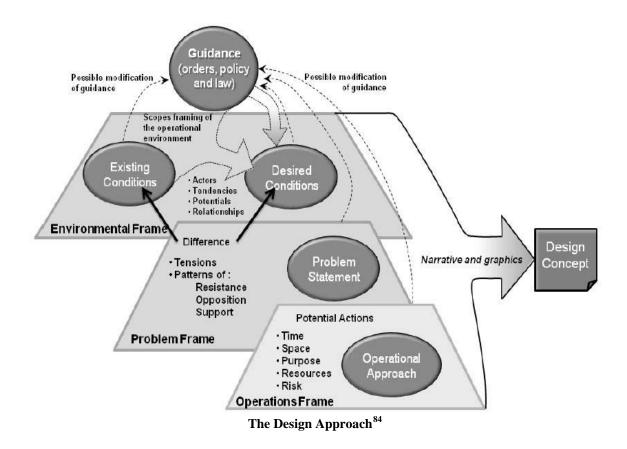
The seven fundamentals of Design are—

- Design requires the commander to lead adaptive work.
- Design is collaborative leadership and learning.
- The uniqueness of each situation requires creating shared understanding.
- Design requires questioning the limits of existing knowledge.
- Understanding is developed through hypothesis formulation and model construction.
- Hypothesis formulation and model construction require synthesis and evaluation.
- Establishing a broad approach to problem resolution is the main objective.⁸³

⁸¹ Ibid., 3-1. The intellectual capacity attribute includes mental agility, sound judgment, innovation, interpersonal tact, and domain knowledge. FM 6-22, 2-4.

⁸² FM 5-0, 3-5.

⁸³ Ibid., 3-4.



The problem solver of the past needs to become the problem manager of the future, and a different approach is needed. Continued reliance on mere analysis and application of professional knowledge may prove adequate to conclude an ordinary career, but future strategic leaders of the Joint Force must develop new habits of thought for the challenges that lie ahead. Design offers an approach with the potential benefit of improved *problem management*.

The challenges for strategic leaders are a "mess" or "wicked problems"-- complex environments with multiple, overlapping, and involved problems. 85 Mechanistic understanding is doomed to failure as linear cause and effect is ambiguous in complicated, complex, and chaotic

⁸⁴ Ibid., 3-7.

⁸⁵ Gharajedaghi, Systems Thinking, 131.

contexts. ⁸⁶ To achieve understanding requires iterative learning, a system to define the environment, identification of the problem (those intolerable conditions in the environment), and a broad operational approach to manage the problem and update learning. This is qualitatively different than executing a process of analysis to *solve* a given problem. One must acknowledge uncertainty and seek feedback through iteration--probe, learn, understand, and continually build a narrative of explanation to drive more learning. All understanding is provisional and should be treated as such, so learning can be continuous. FM 5-0 states that "new understanding is merely a hypothesis. Hypotheses and models explain facts, observations, and judgments about the operational environment to help [manage] the problem."⁸⁷

In 1956, Benjamin Bloom, the eminent psychologist and scholar whose insistence on precision in educational thought revolutionized learning and classroom teaching, headed a group of educational psychologists who developed a classification of intellectual behavior important in learning. Bloom identified six levels⁸⁸ within the cognitive and affective domains, from the simple recall or recognition of facts, as the lowest level, through increasingly more complex and abstract mental levels to the highest order which is classified as evaluation.⁸⁹ Where *analysis* involves separating material or concepts into component parts, *synthesis* involves putting parts together to form a whole. Synthesis is also about creating new meaning or structure, which is consistent with formulating hypotheses and constructing theories. "The operational environment cannot be understood merely by analyzing isolated components. The components not only have great freedom of action, but their collective behavior is also heavily influenced by the many interrelationships among them."⁹⁰ This is not to deny the value of analysis. Yet, analysis alone

⁸⁶ Snowden and Boone, 4.

⁸⁷ FM 5-0, 3-5. The original says "solve" the problem. Manage is the more appropriate verb.

⁸⁸ Bloom's Taxonomy. The six levels are (from lowest to highest): Knowledge, Understanding, Application, Analysis, Synthesis, and Evaluation.

⁸⁹ Benjamin Bloom. *Bloom's Taxonomy*. http://www.cornell.edu/bloom (accessed January 10, 2010).

⁹⁰ FM 5-0, 3-5.

cannot explain behavior because the operational environment is inherently ill-defined and inconsistent. The behavior of the whole does not equal the sum of the parts. Synthesis and evaluation are therefore also critical for the study of the operational environment. ⁹¹

To achieve synthesis in the approach of Design requires cognitive tension. Cognitive tension derives from differences in perspectives, theories, systems, and frames which generate creative tension and diversity. The future Joint leader must regulate stress to maximize critical reasoning and creative thinking to achieve targeted generation of variety--"only variety can absorb variety," The difference, creativity, and variety expose the paradoxes--which are the seeds of novelty. One must embrace uncertainty as the opportunity for change and seek novelty and emergence for their transformative potential. Through robust discourse, leaders can challenge traditional mental models and explore where adaptation can manage a problem and its undesirable conditions. Unlike the analytical approach, the solution to a problem is unlikely this *or* that, but ratios of this *and* that--which is the essence of synthesis. One should not optimize for the middle, but address the systems of the environment and the assailable conditions of the problem.

The Design approach to inquiry about the world is systemic. The "mess" that future strategic leaders face is comprised of complex problems which require systemic response. Only from holistic understanding can one frame the relationships between and among the existing conditions and desired conditions. One must approach complexity by seeking explanations for

_

¹¹ Ibid.

⁹² Gharajedaghi, Systems Thinking, 123-124.

⁹³ Stafford Beer, *The Intelligent Organization*, Conference, Chapter 4 (Monterey, March 1990). The Law of Requisite Variety known as "Ashby's Law" after W. Ross Ashby who proposed it. "The variety in the control system must be equal to or larger than the variety of the perturbations in order to achieve control."

⁹⁴ Peter Checkland and John Poulter, *Learning for Action: A Short Definitive Account of Soft Systems Methodology and its use for Practitioners, Teachers and Students*, (Chichester: John Wiley & Sons, 2006).

⁹⁵ A. Bousquet, *The Scientific Way of Warfare: Order and Chaos on the Battlefield of Modernity* (New York: Columbia University Press, 2009), 26-31.

system behavior and attempt actions in the operational environment or adaptation to facilitate action and transform the system. 96

The Design approach is overly complex for a single individual and demands team effort. Social creation is necessary to attempt shared understanding, manage group dynamics, and expose the challenge of appropriate leadership for adaptive work--consisting of open communications, facilitated discourse, and "activity to mobilize adaptation." The strategic leader identifies the adaptive challenge, regulates tolerable stress, focuses on ripe issues, gives work to stakeholders, and protects the voices of leaders without authority. 98 One must seek generators--tension, time constraints, divergent ideas, and gaps in learning to reap the benefits of the Design approach and promote creativity and generate novelty of ideas, concepts, potential activities and adaptation.

Defining the Problem

"If I were given one hour to save the planet, I would spend 59 minutes defining the problem and one minute resolving it."

Albert Einstein⁹⁹

According to Army leadership doctrine, "critical thinking implies examining a problem in depth, from multiple points of view, and not settling for the first answer that comes to mind." 100 Leadership doctrine appropriately identifies intellectual capacity as a required attribute. However, the following passage still implies that a robust intellect can discern a solution--which

⁹⁶ Gharajedaghi, Systems Thinking, 131-137. Chapter 6 on Formulating the Mess talks about defining problems and systems thinking. Misconceptions about reality obscure the real problem because of mental models, assumptions, and images. Without a process of inquiry, the temptation is to solve the apparent problem which fits an existing model, assumption, or image of reality.

⁹⁷ Ronald A Heifetz,. *Leadership Without Easy Answers*, (Cambridge: Harvard University Press, 1994), 27.

98 Ibid., 128.

⁹⁹ U S Army Headquarters, Commander's Appreciation and Campaign Design. Vol. 1.0 (Fort Monroe, VA: Training and Doctrine Command, 2008). 20. ¹⁰⁰ FM 6-22, 6-1.

resonates with the language of problem-solving. Likewise, it advocates *sorting through* distractions to *isolate the main problem*--which suggests analytical processes.

Army leaders need this ability [critical thinking] because many of the choices they face require more than one solution. The first and most important step in finding an appropriate solution is to isolate the main problem. Sometimes determining the real problem presents a huge hurdle; at other times, one has to sort through distracting multiple problems to get to the real issue. ¹⁰¹

Particularly at the strategic level, the complexity of multiple interdependent variables and the multi-minded system of the strategic environment precludes traditional analysis and the appropriateness of a discrete solution. To define the problem, leadership doctrine should advocate critical thinking to explore where adaptation can manage the undesirable conditions of the problem. The variety of interconnected problems demand a variety of actions or adaptation. This is problem management instead of delusional problem-solving.

Design also protects against solving the wrong problem. When commanders use Design, they closely examine the tensions and the root causes of conflict within the operational environment. From this, they can identify the actual problem with greater clarity and consider more accurately how to solve or manage it. "The danger lies in measuring efficiency of performance without considering effectiveness of actions; it is the difference between solving a problem right and solving the right problem." ¹⁰³ Although it is always important to consider how to solve current problems better, that in itself is not a sufficient basis for assessing approaches to complex problems. No formula exists for resolving the choice among competing solutions. Each problem requires individually-tailored solutions. FM 5-0 advocates the focus on effectiveness by stating that "the choice depends on how commanders apply sound judgment to

¹⁰¹ Ibid.

¹⁰² Gharajedaghi, *Systems Thinking*, 9. The nature of organizations range from a mindless system (mechanical model), to an unminded system (biological model), to a multiminded system (social model). Approaches to deal with those systems range from simple, analytical approach (independent variables), to the systems approach (interdependent variables).

¹⁰³ FM 5-0, 3-3.

their situational understanding. Design provides an approach for leading adaptive work from which a complex, ill-defined situation can be made sense of and acted upon effectively." ¹⁰⁴

For strategic leaders, effectiveness (ameliorating the conditions of the right problem) must take precedence. Increased productivity (efficiency) is a tactical level task. Managing resources and integrating functions and cross-functions are operational level tasks. These lower levels can and will execute appropriate leadership and planning to accomplish the mission assigned to them. Strategic leaders (and their advisors) must define the mission and context (which are Level VI and VII strategic tasks). ¹⁰⁵

ASSESSMENT AND EVALUATION

Depending on the level of understanding and available planning time, Army leaders use and combine several decision making methodologies to help them understand situations and make decisions. These methodologies include: Army problem solving, ¹⁰⁶ Design, ¹⁰⁷ the Military Decision Making Process (MDMP), ¹⁰⁸ Troop Leading Procedures, ¹⁰⁹ and Rapid decision-making and synchronization process. ¹¹⁰ The preponderance of experience, as of this writing, does not yet include Design. There are certainly leaders who have excelled at critical reasoning and creative thinking in their personal execution of the methodologies (other than Design--which is not yet codified in approved doctrine). The assessment of Design's doctrinal impact and broad usage throughout the military may not be seen for some years. The advent of the Design approach being incorporated into doctrine is encouraging, especially because of its potential impact on preparing future senior leaders and their advisors.

¹⁰⁴ Ibid., 3-2.

¹⁰⁵ How the Army Runs, 10.

¹⁰⁶ FM 6-0,

¹⁰⁷ FM 5-0, chapter 3.

¹⁰⁸ Ibid., Appendix A.

¹⁰⁹ Ibid., Appendix B.

¹¹⁰ Ibid., 1-6 & chapter 5.

The U.S. Army's Combined Arms Center (CAC) provides leadership and supervision for leader development and professional military and civilian **education**, institutional and collective **training**, functional training, training support, battle command, doctrine, and lessons learned in order to serve as a catalyst for change. Responsibility for both education and training is significant and when considering leader development, the words "training" and "education" are different. Training is concerned with teaching *what* to think and what the *answers* ought to be. Education is focused on teaching *how* to think and what the *questions* ought to be. Stated simply, the Army trains for certainty and educates for uncertainty.

Training is most frequently used when the goal is to prepare an individual to execute specified tasks. It includes task repetition and is the preferred method of learning when the goal is to perform when success, failure, and completion can be clearly measured. Education has more to do with how to think about problems and how to deal with challenges that may not lend themselves to outright solutions. In the words of Dr. Jeffrey McCausland, the former Dean of the Army War College, "education is a matter of intellect, thought, indirect leadership, advice, and consensus building." The Army develops individuals through officer education programs that include character and leader development modules. Education and training programs range from individual self-development, including graduate-level degree programs, to the entire range of branch and skill related institutional training culminating at the senior service college for officers.

The background portion of this monograph addressed the Army Leader Requirements model which depicted the attributes and core competencies of the Army Leader. Much academic work has been done on the knowledge, skills, attributes, abilities, and competencies of leaders and one could argue that each iteration of leadership doctrine says many of the same things in

¹¹¹ How the Army Runs, 232.

¹¹² Jeffrey D. McCausland, Developing Strategic Leaders for the 21st Century (Carlisle: Strategic Studies Institute, February 2008), x. Dr. McCausland's paper focuses on the development of strategic leader competencies for civilian leaders in the OSD, State Department, and CIA.

different ways. One could also argue that a multi-page list of competencies becomes meaningless in attempting to develop professional development programs at the institutional level and individual self-development activities. Either the exhaustive list becomes exhausting or the pursuit of a finite list of attributes and competencies becomes limiting of creativity and adaptability.

There is certainly controversy surrounding competency-based models, which may facilitate leadership curriculum development, but manifest as pedagogical techniques focused on *what* to think rather than *how* to think. In the words of George Reed and Craig Bullis, et al, in "Leader Development: Beyond Traits and Competencies," it is "tempting, but ill-advised, to believe that we can specify the actions and behaviors required of a strategic leader for success up to 20 years in the future." Three works in particular, which informed the current edition of *FM* 6-22 *Army Leadership*, warrant examination.

The first is the work sponsored by the Army Research Institute for the Behavioral and Social Sciences, on *Competency Based Future Leader Requirements*. They developed eight competencies and 55 components in a framework with example actions for each. The competencies, amplifying components and sample actions were reviewed and validated by selected subject matter experts and their echoes can be seen in current doctrine. The competencies form the acronym LEVERAGE:

Leading others to success

Exemplifying sound values and behaviors

Vitalizing a positive climate

Ensuring a shared understanding

Reinforcing growth in others

¹¹³ George Reed, Craig Bullis, Ruth Collins, and Christopher Paparone. "Leadership Development: Beyond Traits and Competencies," in *The Future of the Army Profession*, eds. Don M. Snider and Lloyd J. Matthews, (Boston: McGraw Hill Custom Publishing, 2005), 585-597.

Arming self to lead

Guiding successful outcomes

Extending influence¹¹⁴

The second is the work by Leonard Wong and a team at the Strategic Studies Institute at Carlisle Barracks, entitled Strategic Leadership Competencies. The team focused on the competencies for strategic leadership, rather than on broad competencies which would serve a steady progression from direct leader to organizational leader to strategic leader. The current "lists of strategic leader competencies are too comprehensive. At the individual level, it is difficult to assess one's leadership ability when the lists suggest that a strategic leader must 'Be, Know, and Do' just about everything." Looking across the existing literature on strategic leadership, the current lists of Army strategic leader competencies, and the future environment, the team instead derived six metacompetencies for strategic leaders: "identity, mental agility, cross-cultural savvy, interpersonal maturity, world-class warrior, and professional astuteness. These metacompetencies describe the strategic leadership necessary for the future Army." 116

Third is the "Officer Study" of the Army Training and Leader Development Panel which asserts "given the ambiguous nature of operational environment, Army leaders should focus on developing the enduring metacompetencies of self-awareness and adaptability." ¹¹⁷ Selfawareness is the ability to understand how to assess abilities, know strengths and weaknesses in the operational environment, and learn how to correct those weaknesses. Adaptability is the ability to recognize changes to the environment; assess against that environment to determine

¹¹⁴ Jeffrey Horey, Jon J. Fallesen et al., Competency Based Future Leadership Requirements, (Arlington, VA: US Army Research Institute for the Behavioral and Social Sciences, July 2004), 66. http://www.au.af.mil/au/awc/awcgate/army/tr1148.pdf (accessed January 30, 2010).

¹¹⁵ Shambach, Strategic Leadership Primer, 57.

¹¹⁶ Leonard Wong, Stephan Gerras, et al. Strategic Leadership Competencies, (Carlisle: Strategic Studies Institute, September 2003), v.

Army Training and Leader Development Panel, Officer Study, (Leavenworth: CGSC, 2001).

what is new and what to learn to be effective; and the learning process that follows. It goes on to state that "self-awareness and adaptability are symbiotic; Self-awareness without adaptability is a leader who cannot learn to accept change and modify behavior brought about by changes to the environment. Adaptability without self-awareness is irrationally changing for change sake, not understanding the relationship between abilities, duties, and the environment." The two metacompetencies together enable lifelong learning and their mastery leads to success in many other skills. Lifelong learning is the "individual lifelong choice to actively and overtly pursue knowledge, the comprehension of ideas, and the expansion of depth in any area in order to progress beyond a known state of development and competency." The operational environment requires lifelong learning by Army officers and units.

Strategic leaders, more so than direct and organizational leaders, draw on their self-awareness and conceptual abilities to comprehend and manage their complex environments. Their environmental challenges include national security, theater strategies, operating in the strategic and theater contexts, and helping vast, complex organizations change. The variety and scope of strategic leader concerns demand the application of more sophisticated concepts and wisdom beyond pure knowledge. Leaders lacking adaptability enter all situations in the same manner and "often expect their experience in one job to carry them to the next. Consequently, they may use ill-fitting or outdated strategies." Failure to adapt may result in poor performance in the strategic environment or outright organizational failure. Adaptability also has to do with both management and leadership. Leadership is about coping with change. Management, by contrast, is about coping with complexity--a response to the emergence of large, complex organizations. Good management brings order to what would otherwise be chaos. Good

_

¹¹⁸ Ibid.

¹¹⁹ FM 7-0.

¹²⁰ FM 6-22, 12-11.

¹²¹ Ibid., 10-8.

leadership foresees changes to the environment and brings organizations through adaptation to the environment. 122

Strategic leaders have to apply both leadership and management since they must cope with change and complexity. They must be "experts in their own fields of warfighting and leading large organizations, and have to be comfortable in the departmental and political environments of the Nation's decision making." ¹²³ Strategic leaders best deal with complexity by embracing it. This means they expand their frame of reference to fit a situation rather than reducing a situation to fit their preconceptions. Demonstrating the agility required to handle competing demands, strategic leaders understand complex cause-and-effect relationships and anticipate the second- and third-order effects of their decisions throughout the organization. 124 They must maintain a clear idea of the national command's perspective and also use tact to justify standing firm on nonnegotiable points while communicating respect for other participants in policy formulation and strategy development. 125

As at all levels of leadership, ethics and communication are critical elements of effective leadership. Being a participant at the national-level also mean leading without authority. Leading without authority requires adaptation to the environment and cultural sensitivities of the given situation. 126 As Ronald Heifetz writes in Leadership Without Easy Answers, "engaging people to make progress on the adaptive problem" requires a learning process, new and innovative ideas, and discovering what changes in attitude and behavior need to occur. 127 This learning process can be led with or without authority. In fact, there may be a benefit to leading without authority as there are constraints and expectations of authoritative decision-making. For example, the formal leader cannot serve as the creative deviant without potential loss of

¹²² McCausland, 7.

¹²³ FM 6-22, 12-1. 124 Ibid., 12-8.

¹²⁵ FM 6-22, 12-5.

¹²⁷ Ronald Heifetz. Leadership Without Easy Answers, 187.

credibility.¹²⁸ Strategic leaders need to prepare to lead without authority and to protect the voices of others who must lead without authority.

CONCLUSION

"Advocating something happen is not the same as making it happen." ¹²⁹
Zbigniew Brzezinski

This research addressed the topic of strategic leadership to find out the extent to which leadership doctrine prepares senior leaders and their advisors for the distinct environment of policy formulation and strategy development, so one can better understand 1) strategic leader behavior, 2) the extent to which it is idiosyncratic, and 3) how the Design approach could facilitate strategic leadership. With this understanding, one can answer the question: Does leadership doctrine adequately prepare future leaders of the Joint Force for strategic leadership? The answer to this question has direct applicability to a very small minority of the Joint Forcethose who will someday become strategic leaders or their advisors. However, the vision and direction of strategic leaders set structure, systems, processes, missions, values, culture, resourcing, alignment, policy and strategy--which build and sustain institutions and perpetuate the profession.

Leadership doctrine, particularly for strategic leadership, is neither dogmatic nor prescriptive. Current leadership doctrine has also limited the penchant towards exhaustive lists of attributes, skills, and actions. While the lists of competencies and attributes still exist in doctrine, they are principally focused on development in junior and mid-grade levels. The totality of the requirements for strategic leaders are not articulated as finite, but instead draw upon the multiple frameworks that one develops from experience, informed intuition, training, broad education, and refined judgment. While this descriptive doctrinal approach for strategic leadership is more

¹²⁸ Ibid., 188

¹²⁹ Zbigniew Brzezinski, "From Hope to Audacity" in *Foreign Affairs*, (Jan/Feb 2010), 30.

appropriate for the ambiguity, complexity and uncertainty of the strategic environment, it does not highlight the discontinuity of leader development from direct and organizational levels.

Subordinate leaders, intimately aware of the command and control structure that surrounds them, evaluate strategic leadership challenges in the frameworks with which they are familiar. The simplistic example is a currently serving direct or organizational leader attempting to analyze a strategic leader decision. The global, regional, national, and societal perspective and context of the decision does not resonate outside the strategic realm. Understanding strategic leader behavior becomes a matter of perspective and context. Preparation and development to work in those contexts is arguably a role for doctrine. Doctrine *describes* the challenges of long-term perspective, multi-order effects, large organizations, leading without authority, complexity, and ambiguity, but specific development is relegated to meta-competencies, self-development, and judgment.

The extent to which strategic leader behavior is idiosyncratic, is a testament to the fact that there is no cookie-cutter approach to development nor a definitive recipe for strategic leader success. Personality matters because "conflicts invariably involve personalities: leadership matters." Strategic leaders must develop (and the plurality of development at this level is self-development) to operate, influence, and improve in the context *described* by doctrine and adapt to the relevant specific context *in situ*. Psychological types indicate preferences for cognition and behavior, but they are not deterministic. The social context and personalities of decision-making entities are part of the relationships and interactions which influence outcomes. Personality does not account for attempts to execute *problem-solving* when analysis is wholly inappropriate; nor does it explain success when intellect and creativity deserve proper credit.

The common attributes of physical, mental, emotional and spiritual fitness apply to all healthy human beings. The technical and tactical skills of the strategic leader inform the context

¹³⁰ Paul Collier and Anke Hoeffler, *Civil War*, Draft chapter for the Handbook of Defense Economics, March 2006, 5.

but become less relevant. Interpersonal skills will always remain a relevant part of leadership since the interaction with those being led or influenced (inside and outside the organization) and the circumstances of that interaction prevail at all levels. Conceptual skills at the strategic level may dominate. Critical and creative thinking are required at varying intensities while developing as a direct leader and as an organizational leader. To transition to strategic leadership (or knowledgeably advise a strategic leader) requires clear thinking, an appropriately robust intellect, creativity, and cognitive skills that enable broad approaches to manage messy problems.

Managing problems is a better description of strategic leader work than *problem-solving*. The opportunity and penchant to approach a "mess" of problems with a learning attitude, prepared to adapt with a broad approach to managing intolerable conditions in a complex system is one thing offered by the Design approach. According to FM 5-0, commanders "use Design if the problem is complex and if they do not inherently have the knowledge, skills, capabilities, and resources to generate full understanding of the circumstances needed to guide operations. However, given the complexity of global and regional operations, the higher the command echelon, the greater the need for Design." Many leaders ask for condensed information, which may be inappropriate for other than simple contexts. Advisors (ostensibly future senior leaders) have been conditioned to provide condensed information and avoid the "thick description" narrative which provides meaning and context and recognizes bias. The need for analysis at lower levels has to be replaced with a need for synthesis as "a complex problem is a problem caused by conditions that are interlocking and interdependent, meaning that the conditions must be understood as an integrated whole." Many ideas should be treated as gestalts--integrated phenomena not derivable by summation of parts--treated in totality, complexity, and dynamics.

An advisor, ignorant of strategic context, may provide condensed information in a

_

¹³¹ Shambach, 2.

¹³² FM 5-0, 3-1.

¹³³ Clifford Geertz, *The Interpretation of Cultures*, (New York: Basic Books, 1973), 3.

¹³⁴ FM 5-0, 3-1

problem-solving, analytical sense, to the detriment of the adaptive challenge and appropriate context. Consistent with the challenges of an organization, solutions cannot be quick-fix or locally rectified. The doctrine for strategic leadership represents both a follow-on from leader development for direct leadership and organizational leadership, as well as a quantum leap forward requiring new, unique and exceptional qualities that are not guaranteed to develop organically among even the most successful leaders at lower levels.

When the preparation for strategic leadership is relegated to the individual, it is no wonder that idiosyncrasy becomes the explanation for differences in style and results. Even before the advent of Design, "knowledgeable commanders have **intuitively** developed designs to frame problems. Problem framing permitted staffs to produce plans using the military decision-making process (MDMP) to achieve the commander's intent. Yet a danger exists in assuming that commanders can always intuitively develop an effective Design concept." ¹³⁵

Final Thoughts

Pursuit of a unified theory--in absolute form--proves problematic in social endeavors.

Leadership is conceptual, technical, and interpersonal which suggests it cannot be completely independent of personality and sociology. Warfare is a product of society--the demos--and requires an understanding of social aspects. There are arguably as many styles of leadership as there are leaders practicing their craft. The perspective and context of strategic leadership has all the trappings of human interaction, the nuance of working alongside the political apparatus of the nation, and the ambiguity, volatility, uncertainty, and complexity of the strategic environment, and the challenges of relying on informed judgment when there is no solution to a problem that one can only hope to manage to a dynamically satisfactory condition.

42

¹³⁵ Ibid., 3-2.

One may be tempted to concentrate mainly on the short term given the volatile nature of the strategic environment. However, strategic leaders cannot allow the crisis of the moment to absorb their thinking. They must remain focused on institutional responsibilities to shape the organization and policies that will be successful over the next ten to twenty years. The values-based culture affirms the importance of individual Soldiers and the Warrior Ethos. The synergy of good leadership, new concepts and doctrine, and new equipment has resulted in the best fighting force in the world. The Army must remain grounded in a commitment to excellence, discipline, and **learning**. For strategic leaders, "the intangible qualities of leadership draw on long and varied experience to produce a rare art." Strategic leaders must intelligently practice that rare art, even without a license to do so.

¹³⁶ FM 6-22, 12-10.

BIBLIOGRAPHY

Ackoff, Russell L. The Art of Problem Solving. New York: John Wiley & Sons, 1978.

Briggs Myers, Isabel. *Type and Teamwork*. Gainesville, FL: Center for Applications of Psychological Type, Inc., 1974.

Briggs Myers, Isabel, and Peter B. Myers. *Gifts Differing: Understanding Personality Type*. Palo Alto, CA: Davies-Black Publishing, 1980.

Checkland, Peter. Systems Thinking, Systems Practice. Chichester: John Wiley & Sons, 1981.

Chairman, Joint Chiefs of Staff. Joint Publication 1: Doctrine for the Armed Forces of the United States. Washington DC: Joint Staff, 2007.

Clausewitz, Carl von. *On War*. Edited by Sir Michael Howard and Dr. Peter Paret. Princeton, NJ: Princeton University Press, 1984.

Cohen, Eliot A. Supreme Command. New York: Anchor Books, 2002.

College, U.S. Army War. *Strategic Leadership Primer*. 2nd. Edited by Stephen A. Shambach. Carlisle Barracks, PA: Department of Command, Leadership, and Management, 2004.

Command, Joint Forces. The Joint Operating Environment: Challenges and Implications for the Future Joint Force. Study, Norfolk: US Joint Forces Command, 2008.

Defense, Department of. *Capstone Concept for Joint Operations*. Capstone, Washington D.C.: Government Printing Office, 2009.

Defense, U.S. Department of. Joint Publication (JP) 1-02: Department of Defense Dictionary of Military and Associated Term. Washington DC: U.S. Government Printing Office, 2007.

- —. *Joint Publication (JP) 3-0: Joint Operations*. Washington DC: Government Printing Office, 2008.
- —. U.S. Army Field Manual 5-0, Army Planning and Orders Production. Washington DC: Government Printing Office, 2005.

DeLanda, Manuel. A New Philosophy of Society: Assemblage Theory and Social Complexity. London: Continuum, 2006.

Deleuze, Gilles. Difference and Repetition. New York: Colimbia Press, 1994.

Drechsler, Donald, and Charles D. Allen. "Why senior military leaders fail." *Armed Forces Journal*. July 2009. http://www.afji.com/2009/07/4114564 (accessed Jan 21, 2010).

Eden, Steven J. "Leadership on Future Fields: Remembering the Human Factors in War." *Military Review* 79, no. 3 (1999): 35-38.

Gharajedaghi, Jamshid. Systems Thinking: Managing Chaos and Complexity. Boston: Elsevier, 2006.

Headquarters, Department of the Army. *Field Manual (FM) 6-22. Army Leadership: Competent, Confident, and Agile.* Washington DC: Government Printing Office, 2006.

Headquarters, U S Army. *Commander's Appreciation and Campaign Design*. Vol. 1.0. Fort Monroe, VA: Training and Doctrine Command, 2008.

Heifetz, Ronald A. *Leadership Without Easy Answers*. Cambridge: Harvard University Press, 1994.

Heifetz, Ronald A., and Marty Linsky. *Leadership on the Line*. Boston: Harvard Business School Press, 2002.

Jullien, Francois. *A Treatise on Efficacy; Between Western and Chinese Thinking*. Honolulu: University of Hawaii Press, 2004.

Jung, C.G. "Archetypes of the Collective Unconscious." In *The Basic Writings of C.G. Jung*, by Violet de Laslo, 18-33. New York: Random House, 1959.

Jung, C.G. "Psychological Types." In *The Basic Writings of C.G. Jung*, by Violet de Laslo, 88-111. New York: Rndom House, 1923.

Keirsey, David. *Please Understand Me II: Temperament, Character, Intelligence*. Del Mar, CA: Prometheus Nemesis Books Company, 1998.

Keirsey, David, and Marilyn Bates. *Please Understand Me: Character & Temperament Types*. Del Mar, CA: Promethius Nemesis Book Company, 1984.

Kuhn, Thomas. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press, 1996.

Lawson, Brian. *How Designers Think: The Design Process Demystified*. Oxford: Architecture Press, Elsevier, 2006.

Liddell Hart, B. H. Strategy. London: Meridian, Penguin Books, 1991.

Luttwak, Edward N. *Strategy: The Logic of War and Peace*. Cambridge, MA: The Belknap Press of Harvard University Press, 2001.

Margolin, Victor. Design Discourse. Chicago: University of Chicago Press, 1989.

Matthews, Lloyd J., and Dale E. Brown, . *The Challenge of Military Leadership*. McLean, VA: Pergamon-Brassey's, 1989.

Mintzberg, Henry. The Rise and Fall of Strategic Planning. New York: Simon & Schuster, 1994.

Obama, Barack H. "Presidential Policy Directive - 1." *White House*. Feb 13, 2009. (accessed July 23, 2009).

Schön, Donald A. The Reflective Practitioner: How Professionals Think in Action. Cambridge: Basic Books, 1983.

Slim, William. *Higher Command in War*. Quantico, VA: US Marine Corps Command and Staff College, 1952.

Snider, Don M., and Lloyd J. Matthews. *The Future of the Army Profession*. Boston: McGrw Hill Custom Publishing, 2005.

Svechin, Aleksndr. Strategy. Edited by Kent D. Lee. Minnesota: East View Publications, 1999.

Taylor, Robert L., and William E. Rosenbach, . *Military Leadership: In Pursuit of Excellence*. Boulder, CO: Westview Press, 1996.

Turabian, Kate L. *A Manual for Writers of Term Papers, Theses, and Dissertations*. 6th. Chicago: University of Chicago Press, 1996.

Ulmer, Walter F. Jr. "Leaders, Managers, and Command Climate." In *Military Leadership: In Pursuit of Excellence*, by Robert L. Taylor and William E. Rosenbach, edited by Robert L. Taylor and William E. Rosenbach, 218-265. Boulder, CO: Westview Press, 1996.

USJFCOM, JWFC. "Joint Warfighting Center Doctrine Group." *A Common Perspective*. Oct 2003. http://www.dtic.mil/doctrine/jel/comm_per/common_perspective.htm (accessed Jan 18, 2010).

Whittaker, Alan G., Frederick C. Smith, and Elizabeth McKune. *The National Security Policy Process: The National Security Council and Interagency System.* Annual Report, Washington DC: Industrial College of the Armed Forces, Nov 2007.